

WHAT IS CLAIMED IS:

1           1. A method for determining and enforcing security policy in a  
2 communication session for a group of participants, the method comprising:

3                 providing group and local policies wherein each local policy states  
4 a set of local requirements for the session for a participant and the group policy  
5 represents a set of conditional, security-relevant requirements to support the session;

6                 generating a policy instance based on the group and local policies  
7 wherein the policy instance defines a configuration of security-related services used  
8 to implement the session and rules used for authorization and access control of  
9 participants to the session;

10                 analyzing the policy instance with respect to a set of correctness  
11 principles;

12                 distributing the policy instance to the participants; and

13                 enforcing the security policy based on the rules throughout the  
14 session.

1           2. The method as claimed in claim 1 wherein the step of  
2 distributing includes the steps of authorizing a potential participant to participate in  
3 the session based on the rules and determining whether the potential participant has  
4 a right to view the security policy.

1           3. The method as claimed in claim 1 wherein the step of  
2 analyzing verifies that the policy instance adheres to a set of principles defining legal  
3 construction and composition of the security policy.

1           4. The method as claimed in claim 1 wherein the step of  
2 generating includes the step of reconciling the group and local policies to obtain the  
3 policy instance which is substantially compliant with each of the local policies and  
4 wherein the policy instance identifies relevant requirements of the session and how  
5 the relevant requirements are mapped into the configuration.

1               5.     The method as claimed in claim 1 further comprising verifying  
2     that the policy instance complies with the set of local requirements stated in the local  
3     policies.

1               6.     The method as claimed in claim 5 further comprising  
2     identifying parts of a local policy that are not compliant with the policy instance and  
3     determining modifications required to make the local policy compliant with the  
4     policy instance.

1               7.     The method as claimed in claim 5 further comprising  
2     preventing a potential participant from participating in the session if the policy  
3     instance does not comply with the set of local requirements of the potential  
4     participant.

1               8.     The method as claimed in claim 1 wherein the step of  
2     enforcing includes the steps of creating and processing events.

1               9.     The method as claimed in claim 8 wherein the step of  
2     enforcing includes delivering the events to security services via a real or software-  
3     emulated broadcast bus.

1               10.    The method as claimed in claim 8 wherein the step of creating  
2     events includes the step of translating application requests into the events.

1               11.    The method as claimed in claim 8 wherein the step of  
2     enforcing further includes the steps of creating and processing timers and messages.

1               12.    The method as claimed in claim 1 wherein the set of local  
2     requirements specifies provisioning and access control policies.

1               13.    A system for determining and enforcing security policy in a  
2     communication session for a group of participants based on group and local policies  
3     wherein each local policy states a set of local requirements for the session for a

4 participant and the group policy represents a set of conditional, security-relevant  
5 requirements to support the session, the system comprising:

6 means for generating a policy instance based on the group and local  
7 policies wherein the policy instance defines a configuration of security-related  
8 services used to implement the session and rules used for authorization and access  
9 control of participants to the session;

10 means for analyzing the policy instance with respect to a set of  
11 correctness principles;

12 means for distributing the policy instance to the participants; and  
13 means for enforcing the security policy based on the rules throughout  
14 the session.

1 14. The system as claimed in claim 13 wherein the means for  
2 distributing includes means for authorizing a potential participant to participate in  
3 the session based on the rules and determining whether the potential participant has  
4 a right to view the security policy.

1 15. The system as claimed in claim 13 wherein the means for  
2 analyzing verifies that the policy instance adheres to a set of principles defining legal  
3 construction and composition of the security policy.

1 16. The system as claimed in claim 13 wherein the means for  
2 generating includes means for reconciling the group and local policies to obtain the  
3 policy instance which is substantially compliant with each of the local policies and  
4 wherein the policy instance identifies relevant requirements of the session and how  
5 the relevant requirements are mapped into the configuration.

1 17. The system as claimed in claim 13 further comprising means  
2 for verifying that the policy instance complies with the set of local requirements  
3 stated in the local policies.

1 18. The system as claimed in claim 17 further comprising means  
2 for identifying parts of a local policy that are not compliant with the policy instance

3 and determining modifications required to make the local policy compliant with the  
4 policy instance.

1           19. The system as claimed in claim 17 further comprising means  
2 for preventing a potential participant from participating in the session if the policy  
3 instance does not comply with the set of local requirements of the potential  
4 participant.

1           20. The system as claimed in claim 13 wherein the means for  
2 enforcing includes means for creating and processing events.

1           21. The system as claimed in claim 20 wherein the means for  
2 enforcing includes a real or software-emulated broadcast bus to deliver the events  
3 to security services.

1           22. The system as claimed in claim 20 wherein the means for  
2 creating events includes means for translating application requests into the events.

1           23. The system as claimed in claim 20 wherein the means for  
2 enforcing further includes means for creating and processing timers and messages.

1           24. The system as claimed in claim 13 wherein the set of local  
2 requirements specifies provisioning and access control policies.